



Clinical practice

Medical, social, and law characteristics of intoxicant's users medically examined in police custody



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ABSTRACT

Introduction: There are no studies on medically examined persons in custody which specifically focus on identifying dependence profiles among users of intoxicants. Nonetheless, the characterisation of dependence profiles for intoxicants such as alcohol, cannabis, cocaine, heroin, amphetamines and their by-products is a medical necessity in this setting.

Materials and methods: A prospective, monocentric, open-ended study conducted by structured questionnaire was carried out on detainees who admitted to having taken an intoxicant/s (tobacco, alcohol, drugs or illegal substances). Social, legal and medical data were collected. The aim of the study was to explore characteristics of these persons in police custody.

Results: 817 questionnaires were examined. More than one-third have a dependence on at least one substance. 37.7% were dependant of tobacco, 86.5% of drinkers, 24.7% of cannabis users. Of these, 90.1% were from men with a mean age of 29.4 years, 40% from individuals living alone, 25.7% from persons with no financial means and 19.6% from homeless persons. 10% were believed to be suffering from mental illness, 7.2% were thought to be asthmatic, 3% to have a chronic infection, and 2.9% to have epilepsy. 36.2% reportedly received treatment, 37.5% of which included benzodiazepine and 20.3% opiate substitution therapy. Incidence of psychological and psychiatric disorders is close to 10% of intoxicant detainees.

Discussion: In this study, some of the stated pathologies occur in ratios similar to those in other published results. But, there is a high, and probably underestimated, prevalence of psychological and psychiatric disorders in this population of detainees reporting exposure to intoxicant or illegal substances.

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1. Introduction

In France, the number known of persons in custody peaked in 2009, with an estimated 580,108 detained for non-traffic crimes and offences.¹ A reform measure designed to buttress individuals' rights as well as to reduce the number of persons in police custody was enacted.² One of the rights assured and pursuit by this new law is the individual's right to a medical examination to determine whether or not this custodial measure befits his state of health.³

This request can be made by either the individual himself, the judicial authorities (police or magistrate) or the individual's family (French criminal procedures code, 2011). This medical evaluation is compulsory for minors under 16. Before that in December 2010 a law⁴ attributed to each academic hospitals in their cities, this medical evaluation for detainees which was performed before by generalist practitioners.

The distinguishing characteristic of this group of detained persons considered by the French judicial authorities to be offenders, is a higher prevalence of chronic pathologies⁵ and drug use compared to those seen in the general population using general practitioner records. There are few data on this area, and studies on the subject are scant.⁵ In France, excepting some hospital specific units before the new law of December 2010, the general practitioners who effectively evaluated detainees in custody, did not realize studies. In

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the literature, the few existing published studies on the subject focus more on the medical treatment of withdrawal symptoms or the effects from the use of intoxicants suffered by these persons while in custody.^{6–10} In France, this medical examination must be able to be performed within 3 h of the beginning of the police custody. It is therefore vital for the caregiver to be able to identify the types of dependence in order to assess their effect on the individual's physical and psychological health.¹¹ This type of medical evaluation is mandatory, as it makes it possible to anticipate the likelihood of withdrawal symptoms occurring and to take positive medical steps to help the detainee. This information is of direct benefit to the medical examiner and to a large extent aids in assuring both the person being examined and the police that the person's health is somewhat protected.

This study outlines the data collected from subjects in custody who have admitted to taking intoxicant/s. An analysis was conducted to evaluate the medical, social and penal characteristics of these subjects. These additional determining factors are necessary for enabling a more comprehensive evaluation of the state of health, rather than one focussing solely on the intoxicant/s used.

2. Materials and methods

The research was done in Nantes police station. Nantes is a city in West France, the 6th largest in France, while its metropolitan area ranks 8th with nearly 900,000 inhabitants. The duration of the study was from January 2012 to June 2012. The subjects included were all persons having admitted to taking an intoxicant/s and who were required to undergo an examination to determine the appropriateness of this custodial measure to their state of health. The substances considered intoxicants were tobacco, alcohol (including persons tested while intoxicated), cannabis (an illegal substance in France), heroin and amphetamines. In each medical checking, the forensic practitioners meant their membership in the academic hospital, that all medical information's were covered by the medical confidentiality. This fundamental distinction could limited under-reporting of the drugs consumption even illicit. The subjects were asked to respond to a structured questionnaire after verbally consenting to an analysis of their data. This questionnaire collected the following data: social (sex, age, social and family status, existence of a fixed address); professional (whether or not employed, on welfare or having access to other means); penal history (prior remands in custody, offences charged), and medical (medical history, prescribed treatments). Participants were notified about confidentiality and informed that the data collected would be anonymised. The practitioners also assured the persons being examined that this information was of a medical nature, protected by professional secrecy and therefore would not be passed on to authorities requesting it. The exclusion criteria included: refusal of the detainee to submit to a medical examination, his objection to use of his data, difficulty in understanding the questionnaire due to a language barrier, and withdrawal symptoms or the effects of the substances taken by the detainee in custody because they were unfit to give consent, to understand and answer to the planned questionnaire.

3. Results

Over this 6-month period, 1147 detainees were examined by a physician. 80% of examined detainees asked for help and for 20% of them, it was the police requested for a medical check. 158 persons did not report any use of tobacco, alcohol or illegal substances, and 131 either refused to be examined, did not consent to the questionnaire or objected to the use of their data. Lastly, 41 persons were unable to answer the questions owing to difficulty understanding French or to a temporary alteration of their cognitive

abilities due to withdrawal or associated with the effects of intoxicant substances. As a result, 817 questionnaires were able to be used. Within this population, 90.7% smoke tobacco and 37.7% of these within the first five minutes of awakening and 28% consuming more than 20 cigarettes a day. 47.2% report using alcohol regularly or are under the influence of alcohol while being medically evaluated. 86.5% of the alcohol users reported that had already felt the need to decrease alcohol consumption, relatives one commented about alcohol consumption, impression of drinking too much. 34.4% declared to consume at least another illicit drugs and 6.4% at least two other intoxicants. Of all the detainees medically examined over the period of this study, 15.3% use cannabis, 1.6% cocaine and 2.0% heroin. 24.7% were dependant of cannabis with smoking in more important quantity or over a period longer than planned and/or persistent desire of stopping. Males account for 90.1% of the population studied. The mean age is 29.4 (maximum age 76, minimum age 13.3). 40% of this population reported living alone, and 19.6% do not have a postal address. 196 (24%) persons indicated that they were responsible for at least one child (assume financial charge). 40.2% of these persons detained were unemployed. This was the first detention for 160 persons, while 398 persons (48.7%) have been detained more than five times.

These persons were detained mainly for three reasons (Table 1): personal injury charges (35.6%) with 10% involving narcotic offences; 24.4% on charges for damage to property and 21% for traffic offences.

The stated medical histories noted among this population feature mental pathologies, with 3.5% suffering from depression, 2.8% from anxiety, and 1.7% from psychotic pathologies. 7.2% reported being asthmatic, 3% reported having a chronic infection (including 1.3% HCV, 0.5% HBV, 0.4% HIV), 2.9% epilepsy, and 1.6% reported cardiovascular disorders. 36.2% said they were undergoing treatment and gave the name of the prescribed medication. Of this group, 13.2% were on buprenorphine treatment taking 10 mg per

Table 1

List of the breaches blamed (several breaches can concerned a person placed under police custody).

Blamed breaches police custody	Number	Percentage
Murders and offences against the persons	350	35.6%
Affected the life: voluntary and involuntary manslaughter	5	0.5%
Violence, threats	232	23.6%
Sexual assaults	13	1.3%
Moral harassments	1	0.1%
Breaches of the legislation of narcotics	99	10.1%
Crimes and offences against the properties	289	29.4%
Fraudulent appropriations	186	18.9%
Common thefts or deteriorated	169	17.2%
Extortions	8	0.8%
Swindles	6	0.6%
Nearby breaches: fraud	3	0.3%
Others offences against the properties	103	10.5%
Receivingsn	48	4.9%
Destructions	55	5.6%
Crimes and offences against the State, the nation and the public peace	68	6.9%
Offences of illegal residency	43	4.4%
Driving offences	207	21.1%
Driven under the influence of the alcohol	113	11.5%
Driven after use by narcotics	16	1.7%
Defects of driving licence or insurance	32	3.3%
Driven) in spite of suspension, cancellation or ban to obtain a driving licence	21	2.1%
Excessive speeds	3	0.3%
Refusal to obey	9	0.9%
Other	13	1.3%
Breaches of the legislation of weapons	25	2.6%
Total	982	100%

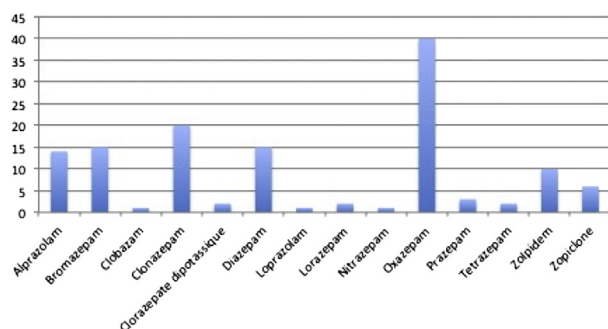


Illustration 1. Distribution of benzodiazepine used.

day, 7.1% were on methadone treatment (daily dose of 78 mg) and 5.7% were on opioid therapy. Benzodiazepine use accounted for 37.5% of all prescribed treatments, distributed as in Illustration 1. Antipsychotic drugs were used in 12.8% of the treatments (Table 2).

4. Discussion

This is the first French study focusing on the medical, social and penal characteristics of detainees who reported the use of intoxicants during a medical evaluation. Only one recent study was published by a team in Paris¹⁵ which concentrated exclusively on alcohol use by detainees. Our results are replicated in a small number of internationally published studies.^{5–10}

Since the enactment of a legal medical reform in France,⁴ university hospital forensic departments have been responsible for assessing the state of health of persons detained in police stations. Organised as such, it becomes possible to carry out this type of study and to identify other characteristics in users of intoxicant substances who have been detained. Research teams will from now on be able to produce scientific data in this field. More so in France than elsewhere, little research has been conducted in this area.¹¹ In a forward-looking medical evaluation, it is important to estimate the medical characteristics of reporting exposure to intoxicant or illegal substances of detainees.

The ratio of men and the age distribution in this study are comparable with other research studies, particularly on English-speaking populations.^{5,8–10} This observation is similar from a sociological perspective, as it highlights a significant proportion of unemployed persons living solely from welfare benefits. Moreover, almost 25% of this population showing a pattern of addictive behaviour, is without any financial means. Similarly, 1 in 5 detained persons reporting intoxicant substance appears not to have any fixed place of abode.

In this study, some of the stated pathologies occur in ratios similar to those in other published results. As in the Dutch study, it appears that 7–8% of the individuals are reportedly asthmatic and almost 3% epileptic.⁵ Reports of chronic infectious diseases, especially HCV and HIV are comparable to another study¹⁶ but fall well

below the Dutch figures for HIV.⁵ However, there are contrasting results with regard to cardiovascular disorders. Results from the two studies identify the incidence of heart disease as fluctuating between 1 or 2% and as much as 10% and between 6 and 12% for hypertension.^{5,16} These ratios are clearly higher than those produced by our study (1.6%). These variations may be attributable to different medical response procedures depending on the countries where persons are detained in police stations. In fact, in France persons have a right to a medical examination based on the goodwill of the person or his family, or at the legitimate or even precautionary request of the judicial authorities. This examination is routinely offered for minors under 16.² Unlike in England, French police do not have a procedure for evaluating state of health and require medical intervention to do so directly.⁷ This separate decision-making mechanism could be the reason why morbidity ratios among these detainees on the other side of Celtic sea are higher. The Dutch study, which approximates our recruitment method, shows a much higher proportion of persons treated for hypertension.⁵ The authors explain, however, that the data is not meant to be interpreted as descriptive of the detainee population, but rather as a ratio of treatment intervention. These findings substantiate observations of the disproportionate number of persons with diabetes, a virtually non-existent disease among our population (0.6%).

On the other hand, recruitment biases and evaluation differences aside, the proportion of persons reporting psychological and psychiatric disorders in our study is still substantial, encompassing close to 10% of the individuals exposed to intoxicant substance use. These results are consistent with other studies which assess the percentage of detainees in custody suffering from mental disorders at 5%¹⁷ and over 10%.¹⁴ The number of mental illnesses, particularly psychological disorders, rises even further when reported treatment applications are taken into consideration. More than one-third of the subjects mention a medical prescription and the incidence of benzodiazepine use is high. It is important to remember that the mean age of this population is young, ranging between 29 and 30 years. Furthermore, among reported medication use, antipsychotic drugs account for more than 10%. These medical prescriptions indirectly reflect the therapeutic management of mental disorders within this population. In a prospective French study,¹⁵ 7% of all the person in custody suffered from a chronic psychiatric disorder. This same study revealed that 2–5% of persons in custody who were under the influence of alcohol had a mental illness. These results are in keeping with the 13% ratio of mental illness among alcoholics and a 5% level of dependence on other drugs, reflected in a British study.¹⁷ There is therefore a high, and probably underestimated, prevalence of psychological and psychiatric disorders in this population of detainees reporting exposure to intoxicant or illegal substances.

The judicial grounds on which these persons are detained are not directly linked to use of the stated substances. With respect to substances classified as illegal in France – cannabis, heroin, cocaine and amphetamines, and reportedly used by these persons, only 11.8% show a direct link with charged offences. In the case of blood alcohol content, the criminal level for a motorist in France is 0.8 g/l. Still, 11.5% of charges are directly linked to this offence. On the other hand, violations involving violence – violence and threats against a person/s and destruction of property account for 29.2% of offences within this population. There are currently no data available to allow for a comparison with a detainee population not given to the use of intoxicant substances. However, some studies have demonstrated a link between intoxicant substance use and violent behaviour towards others.^{20–22} Persons with alcohol problems run a high risk of inflicting violence on relations and others,²² as are persons who admit to cannabis use.²³ A correlation between deviant behaviours and cocaine dependence has also been noted.²⁴

Table 2
Antipsychotic drugs.

Neuroleptics	Number of users
Amisulpride	1
Aripiprazole	1
Cyamemazine	19
Levomepromazine	1
Olanzapine	12
Risperidone	4
Zuclopenthixol acetate	1
Total	39

In short, the use of alcohol or illegal substances is believed to be the direct cause of violations resulting in the detention of these persons, and the legal consequences on the behavioural effects of these products pertains to more than a quarter of these violations.

There are a number of limitations to this research. The study relates to a major city in western France and some of the results cannot be extrapolated owing to its monocentric nature. The data collated are declarative. The physicians involved in treating the detainees did not have any means of verifying this data. While taking into consideration the autonomy of the examining physician and his hospital connections, especially compared to the police, it is theoretically conceivable for the substances and consumption patterns of these detainees to be under-reported. It is possible that the illegality of numerous substances such as heroin, cocaine and to a lesser extent cannabis, actually leads persons to conceal their use of these substances. In the case of alcohol, the area where this study was conducted is also the region of France where excessive alcohol consumption is highest, particularly within the 15–25 age range.²⁵

5. Conclusion

This study on the reported use of intoxicant substances by persons in custody demonstrates a medical view quite similar to that represented by published data. In contrast, psychological and/or psychiatric disorders affect at least 10% of these persons. More than one-third of this group reports undergoing drug treatment, with a high proportion on benzodiazepine. These substances may be the cause of withdrawal symptoms. It may be advisable to encourage studies to investigate whether such substance use is not in itself addictive behaviour, particularly among alcohol users. The use of intoxicant and illegal substances has direct and indirect effects on just under half of these detained persons. Further studies would have to be conducted to determine the degree of dependence on these products in order to substantiate correlations with the incidence of charged offences.

Ethical approval

None.

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Contributors

Authors Marie Gerardin and Renaud Clement designed the study and wrote the protocol. Renaud Clement Z managed the literature searches and summaries of previous related work. Authors Gabriel Guigand, Laura Wainstein and Caroline Vignaud Victorri undertook the statistical analysis, and authors Marie Gerardin and Renaud Clement wrote the first draft of the manuscript. The manuscript was reviewed by Pascale Jolliet Evin. All authors contributed to and have approved the final manuscript.

Conflict of interest

None.

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